

DISTRIBUTED LOAD TRANSMISSION LINE MATCHING NETWORK

ABSTRACT OF THE DISCLOSURE

An apparatus and method for maximizing ac energy delivered to a load
5 by minimizing energy reflected from a load, such as an RF power source coupled to a
plasma load for substrate processing chambers, including a matching network, wherein
the matching network couples an ac power source and load. The matching network
having two transmissions lines that are inductively coupled for a fixed portion of their
length, such length being at least one wavelength of the ac energy generated by the ac
10 power source. The matching circuit providing continuously variable impedance
matching through the use of fixed components.

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